First Billion

Input file:	*standard input*
Output file:	*standard output*
Time limit:	2 seconds
Memory limit:	512 mebibytes

You are given N positive integers. Your task is to select some of the given numbers so that the sum of the selected numbers is exactly 10^9.

To make it a little easier for you to solve the problem, the jury promises that the tests will be organized as follows.

1. Two random sets of exactly n positive integers with the same sum 10^9 are generated (a uniform distribution is taken over all sets with sum 10^9).
2. You are given $N = 2n$ generated elements in random order. The value $N = 2n \leq 100$.

Input

The first line contains a positive integer $N = 2n \leq 100$.

The second line contains N positive integers $a_1, \ldots, a_N$.

There are exactly 100 tests in the problem.

Output

Output a line describing a set with sum equal to 10^9: first the number of indices k, then k different indices $i_1, \ldots, i_k$ for which $\sum_j a_{i_j} = 10^9$ is satisfied.

It is not necessary to find a set of size exactly n.

Example

standard input
10 386413329 88494216 245947398 316438989 192751270 204627269 65749456 3938400 150458676 345180997
standard output
5 2 3 4 8 10